

REMARKS

Claims 1, 2, 7-13, 17-25 and 27 of the application stand rejected. Applicants respectfully request reconsideration of pending Claims 1, 2, 7-13, 17-25 and 27 in light of the remarks herein.

35 U.S.C. § 103

Claims 1, 2, 7-13, 17-25 and 27 stand rejected under 35 U.S.C. § 103 as being unpatentable over Naik (U.S. Publication No. 2006/0294238 A1) in view of Bulson et al (U.S. Publication No. 2005/0060704 A1). Applicants respectfully traverse the rejections.

The Examiner reiterates his previous rejection based on the assertion that Naik teaches all the elements of the independent claims with the exception of “a second virtual machine”. In support of the “second virtual machine” claimed, the Examiner suggests that Bulson teaches this element and therefore, in combination with Naik, these references render the claimed invention unpatentable. Applicants’ strongly disagree.

Once again, Applicants respectfully highlight the focus of the present invention which is directed to a virtualized host platform wherein only a portion of the platform resources are dedicated to a grid application while the remaining resources on the platform continue to be used by a user. Thus, as claimed in independent Claims 1, 11, 21 and 25, a second virtual machine is isolated from the grid virtual machine and configured to run applications other than the grid application. This provides the virtualized platform with a significant degree of security because the grid application is isolated from the other platform activity.

Applicants respectfully submit that the scheme as claimed herein is different from the scheme in Naik and/or Bulson and would not have been obvious to one of ordinary skill in the art based on the combination of these references. The focus in Naik is directed to controlling a set of distributed resources in a grid network environment. Bulson, on the other hand, addresses the issue of producing a virtual machine on demand to process requests. Applicants concede that Bulson does discuss the use of virtual machines within a grid environment, but Bulson nonetheless fails to teach elements of the invention as claimed herein. Specifically, as described in Bulson, Paragraph 17:

[0017] In accordance with an aspect of the present invention, a request obtained by a node of a computing environment is processed by a virtual machine of that node, and the virtual machine is exclusive to that request. In one example, the starting of the virtual machine is initiated or controlled by another virtual machine of the node. Subsequent to completing the request, the virtual machine exclusive to the request is sanitized and terminated.

Bulson thus utilizes temporary virtual machines (within or out of grid networks) to service requests. It describes a scheme whereby a virtual machine manager (VMM) and at least one VM (“referred to as “the job virtual machine”) are utilized to facilitate interoperability (Bulson, Paragraph 18). Nothing in Bulson teaches or suggests the claimed elements of creating a grid virtual machine and allocating first base resources and then supplemental resources to the grid virtual machine, while dynamically balancing the load on the host platform. Bulson also does not teach or suggest running grid and non-grid applications on a single host platform. Bulson simply contemplates a scheme whereby a virtual machine is produced on-demand to address a specific grid request. Similarly, Naik makes no mention of running grid and non-grid applications on a single platform.

Applicants therefore respectfully submit that both these references fail to teach at least one critical element of the invention. The use of virtual machines to run grid and non-grid applications on a single host facilitates the use of devices that may otherwise not be available to the grid. Unlike Naik and Bulson, the present invention addresses the inherent risks in a grid network. The scheme articulated herein (and claimed herein) address both a VMM managing resources for the platform as a whole, while a resource manager monitors the activity in the grid VM and supplements resources and/or enforce policies on the grid VM. Naik and Bulson, alone or in combination, do not teach or suggest these elements.

In summary, Applicants respectfully submit that independent Claims 1, 11, 21 and 25 and all claims dependent on these claims are patentable over Naik and/or Bulson. As such, Applicants respectfully request the Examiner to withdraw the 35 U.S.C. § 103 rejections to Claims 1, 2, 7-13, 17-25 and 27.

CONCLUSION

Based on the foregoing, Applicants respectfully submit that the applicable objections and rejections have been overcome and that pending Claims 1, 2, 7-13, 17-25 and 27 are in condition for allowance. Applicants therefore respectfully request an early issuance of a Notice of Allowance in this case. If the Examiner has any remaining questions, he is encouraged to contact the undersigned at (714) 730-8225.

Respectfully submitted,

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